

REMARKS

Claims 1-14, 17, 18 and 26-28 are now in this application. Claims 1-18 and 26 are rejected. Claims 1 and 9 are objected to. Claims 15 and 16 are cancelled. Claims 1, 9-14, 17, 18 and 26 are amended herein to clarify the invention, to broaden language as deemed appropriate and to address matters of form unrelated to substantive patentability issues. New claims 27 and 28 are added.

The applicants and applicants' attorney appreciate the Examiner's granting of the telephone interview conducted on April 3, 2002, and extend their thanks to the Examiner for his time and consideration. While no agreement was reached regarding the proposed claim language presented by applicants counsel, the claims have been have further amended herein and additional claims added. In addition, supporting arguments in favor of patentability, and which arguments particularly address some of the opinions expressed by the Examiner during the course of the above referenced interview are provided.

It is further noted, that the Examiner was contacted by applicants' attorney subsequent to the above interview, in the hopes of arranging a further interview, which could be conducted with the Examiner's supervisor present, at which time these points detailed below could be discussed prior to filing of the present amendment. The Examiner indicated that he could not grant such supplemental

interview prior to the current date for response due to scheduling constraints, but that the possibility existed that the merits of the case could be discussed prior to his acting on the amendment. Applicants will therefore contact the Examiner shortly after the filing of this amendment to arrange such telephonic interview with the Examiner and his Supervisor.

Applicants herein traverse and respectfully request reconsideration of the rejection of the claims and objections cited in the above-referenced Office Action.

The Office Action states that the specification is objected to for various informalities, including lack of appropriate headings and sections. The specification is amended to address these informalities. No new matter is added. Withdrawal of the objection is respectfully solicited.

The disclosure is further objected to for allegedly failing to include a section entitled "Cross-reference to Related Applications." Applicants have previously requested that the specification be amended to include this section in the transmittal letter accompanying the application when filed (see page 2, penultimate paragraph). However, to assure completeness of response, the amendment to the specification is repeated herein to incorporate such section. Withdrawal of the objection is respectfully solicited.

Claims 1 and 9 are objected to for various informalities. The claims are amended to remove or correct the informalities noted in the Office Action. Therefore, withdrawal of the objection is earnestly requested.

Claims 1-18 and 26 are rejected as indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter of the invention as a result of informalities stated in the Office Action. Claim 15 is cancelled, rendering its rejection moot. Remaining claims 1 and 14 are amended to remove or correct the informalities noted in the Office Action. Therefore, reconsideration of the rejection of claims 1-18 and 26 and their allowance are earnestly requested.

Claims 1 and 9-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Konegen et al. (JP 10061783). Applicants herein respectfully traverse these rejections.

For a rejection to be sustained under §102(b) each and every element of the claimed invention must be disclosed in the cited prior art reference. It is respectfully submitted that the cited reference fails to disclose at least the following features and elements of the present invention as noted herein.

Independent claim 1 recites in pertinent part the following:

structure including a first port and a second
port that are connected with each other via a
bellows therebetween, said structure being
molded from a molding material comprising a

mixture of a thermoplastic elastomer resin and
mineral oil

As such, claim 1 recites a flexible resin boot structure molded from a mixture of thermoplastic resin and mineral oil. No such feature is taught or suggested in the cited Konegen et al. reference. The disclosed subject matter of Konegen et al. is directed to a boot which is impregnated with a hydrocarbon which can include oil. In contrast to the presently claimed invention of claim 1, Konegen et al. teaches that the oil is apparently applied to a surface of the already-formed boot, and allowed to penetrate into a surface region. Therefore, the nature of the dispersion of the oil within the boot structure of Konegen et al. differs inherently from that of the presently claimed invention, and therefore claim 1 is structurally distinct from the Konegen et al, reference.

Applicants note that, during the interview, the Examiner appeared of the opinion that since claim 1 is written to include function terms, these limitations do little or nothing to impart patentability, based upon the position that functional steps in structural apparatus claims carry little patentable weight. Applicants argue, however, that while this principle applies to a prospective functional use limitation in a structural claim, it does not apply to a product produced by a process (product-by-process) which results in a structure which can be inherently distinguished from structure taught by the art of record. "The practice and governing law [relating to

product-by-process claims] have developed in response to the need to enable an applicant to claim an otherwise patentable product that resists definition by other than the process by which it is made.” In re Thorpe, et al., 227 USPQ 964 (CAFC 1985). Therefore, product-by-process claims are entirely proper, and moreover, patentably distinguish so long as the particular process claimed produces a product which differs structurally from the art of record.

~~Claim 1 is amended and particularly describes and distinctly claims at least~~ one element not disclosed in the cited reference. Claims 9-14 dependent from claim 1 also contain this element lacking in Konegen et al.. Therefore, reconsideration of the rejections of claims 1 and 9-14 and their allowance are respectfully requested.

Claims 15 and 16 are rejected under 35 U.S.C. § 102(b) as being anticipated by Takagi et al. (US 4,967,609). Claims 15 and 16 are cancelled, rendering the rejection moot.

Claims 2-8, 17 and 18 are rejected as obvious over Konegen et al. in view of Berendse et al. (WO 97/46618) under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection.

It is respectfully submitted that the proffered combination of references cannot render the rejected claims obvious because the secondary Berendse et al. reference does not provide the teaching noted above with respect to the anticipation rejection of claim 1, from which claims 2-8, 17 and 18 depend, that is absent from the primary Konegen et al. reference. Thus, the combination of prior art references

fails to teach or suggest all the claim limitations. Therefore, reconsideration of the rejections of claims 2-8, 17 and 18 and their allowance are respectfully requested.

Claim 26 is rejected as obvious over Konegen et al. in view of Kahoki et al. (JP 10279747) under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection.

For a rejection under 35 U.S.C. §103(a) to be sustained, the differences between the features of the combined references and the present invention must be obvious to one skilled in the art.

The secondary Kahoki et al. reference is offered for teaching relating allegedly to the addition of paraffin oil and naphthene oil to a thermoplastic elastomer. However, it would appear that the reason given for adding such oils is specifically for the prevention of slippage of the molding material. Consequently, the problem addressed by Kahoki et al. is entirely different from that of the present invention. Therefore, one skilled in the art would not look to Kahoki et al. as a source of information to arrive at the solution proposed by the present invention. The basic issue in determining obviousness is whether the applied references, alone or in any combination, suggest the claimed invention as a solution to the specific problem solved. It is the vantage point of attacking the problem at the time the invention was made that is to be examined. When prior art itself does not suggest or render obvious the claimed solution to that problem, the art involved does not satisfy the criteria of 35 U.S.C. §103 for precluding patentability. *Lindemann*

Maschinefabrik Gmbh v. America Hoist and Derrick Co., 221 U.S.P.Q. 481 (Fed. Cir. 1984).

Moreover, since the Konegen et al. reference teaches impregnating a finished boot structure with oil rather than preparing a mixture of oil and thermoplastic elastomer from which a boot structure is molded, such disclosure teaches away from combining the two references in the manner suggested to arrive at the presently claimed invention of claim 26. References must be taken in their entireties, including those portions which argue against obviousness. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 230 USPQ 416, 420 (Fed. Cir. 1986). Consideration must properly be given to teachings of the prior art which would lead one away from the claimed invention as well as those that might suggest the invention. *Mendenhall v. Astec Industries, Inc.*, 13 USPQ2d 1913, 1939 (Tenn 1988), *aff'd*, 13 USPQ2d 1956 (Fed. Cir. 1989). In the present instance, one of ordinary skill in the art would not be lead to produce a boot of the type claimed from a mixture of oil and thermoplastic elastomer resin since Konegen et al. teaches impregnating an already-formed boot with oil.

Thus, it is respectfully submitted that the rejected claim is not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejection of claim 26 and its allowance are respectfully requested.

Claims 27 and 28 are added and are submitted as patentable over the cited art of record. Dependent claim 27 is patentable based on the subject matter cited therein

in addition to the subject matter of claim 1. Independent claim 28 recites subject matter directed to a flexible material containing a thermoplastic elastomer resin and mineral oil, an aromatic content of the mineral oil being not greater than 13 % which, among other features recited therein, is not believed disclosed in the cited art in the manner as claimed. While the Examiner states in the Office Action at page 6, paragraph 7, that “[P]araffinic oil by definition has no aromatic content,” applicants respectfully suggest that this is not necessarily accurate. Generally, there are three kinds of mineral oils, i.e., paraffinic process oil, naphthenic process oil and aromatic process oil. Each of these oils does not comprise paraffin, naphthen or aroma alone, and is usually a mixture of these three components. The three kinds of oils are defined by component proportions of the three substances (see specification at page 17, lines 8-16). In accordance with the invention of claim 28, use of mineral oil whose aromatic content is 13% or less, allows the oil to bleed onto the surface of a boot to a preferred extent, with particularly advantageous benefits including excellent, long-lasting noise prevention and improved durability (see specification, page 6, line 14 to page 7, line 2, and pages 47-50). Therefore, based upon the above, favorable action on the merits is earnestly solicited.

Applicants respectfully request a two (2) month extension of time for responding to the Office Action. Please charge the fee of \$410 for the extension of time to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

Respectfully submitted,
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APPENDIX I**AMENDED CLAIMS WITH AMENDMENTS INDICATED THEREIN
BY BRACKETS AND UNDERLINING**

1. (Amended) A flexible resin boot, comprising: [formed from a base resin material of a thermoplastic elastomer resin and]

structure including [having] a [large] first port and a [small] second port that are connected with each other via a bellows therebetween, said structure being molded from a molding material comprising a mixture of a thermoplastic elastomer resin and [wherein] mineral oil [is added to the thermoplastic elastomer resin, and said mineral oil is at least one process oil selected from paraffinic oil and naphthenic oil whose aromatic content is 13 % or less].

9. (Twice Amended) The flexible resin boot as claimed in claim 1]27, wherein the [mineral oil is at least one process oil selected from paraffinic oil and naphthenic oil whose]aromatic content of said mineral oil is from 0 to 10 %.

10. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein said mixture includes at most 5 parts by weight of the [process] mineral oil [is added] to 100 parts by weight of the thermoplastic elastomer resin.

11. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein the [process] mineral oil has a number-average molecular weight of from 200 to 2000.

12. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein the [process] mineral oil has a weight-average molecular weight of from 100 to 2000.

13. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein the [process] mineral oil has a Z-average molecular weight of from 200 to 3000.

14. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein the [process] mineral oil has a kinematic viscosity of from 100 to 1000 mm²/sec(25°C) as determined by measurement [measured]with a B-type viscometer.

17. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein a degree of swelling of the [polyester] thermoplastic elastomer resin in the mineral oil is at most 8 % by volume.

18. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein a degree of swelling of the [polyester] thermoplastic elastomer resin in the mineral oil is at most 6 % by weight.

26. (Amended) The flexible resin boot as claimed in claim 1 or 9, wherein a paraffin content of the [process] mineral oil is from 60 to 78 %, and a naphthene content of the [process] mineral oil is from 20 to 35 %.